

# Hydrogen Back Pressure Effects on the Dehydrogenation Reactions of $\text{Ca}(\text{BH}_4)_2$

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## Supporting Information:

Figure S1.  $^{11}\text{B}$  MAS NMR spectrum of amorphous boron (Aldrich) and its spectral decomposition into two major peaks at 4.5 ppm and -16 ppm. The distribution of two peaks is in a 4:1 ratio according to the signal integration.

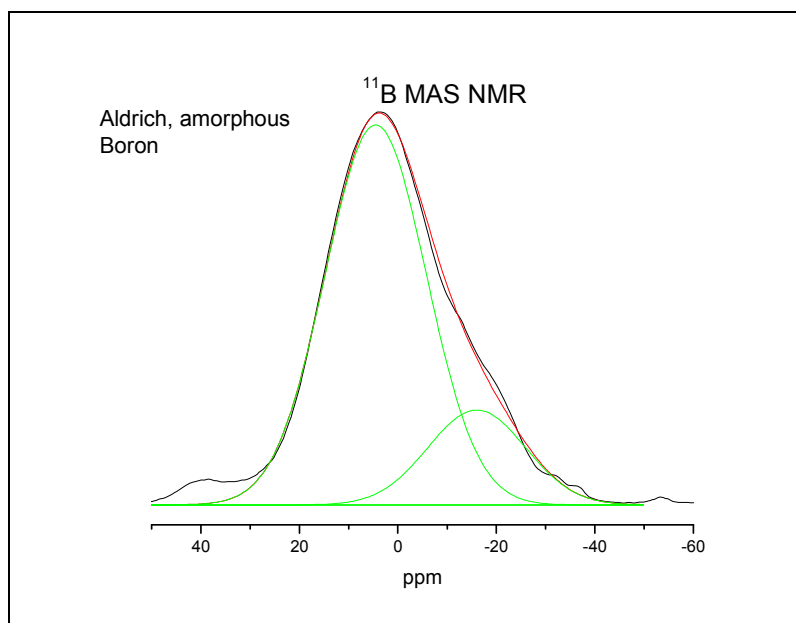


Figure S2.  $^{11}\text{B}$  MAS NMR spectra with decomposition into  $\text{CaB}_6$  (broken line at 14 ppm), elemental boron (blue solid line at 4.5 ppm and -16 ppm),  $\text{CaB}_{12}\text{H}_{12}$  (broken line at -15.6 ppm), and  $\text{Ca}(\text{BH}_4)_2$  related unidentified amorphous phase (green solid lines at -32 ppm and -40 ppm)

